

APRIL/MAY 2024

23PCA13 — PYTHON PROGRAMMING

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL the questions.

1. What are two fundamental ideas of computer science?
2. Define the term Expression.
3. How will you access the characters and substring in a string?
4. What are the types of Namespaces in Python?
5. What is the important feature of GUI-based version of program?
6. What is the role of two dimensional grid data structure?
7. What are the two primary data structure of Pandas?
8. What is the purpose of Matplotlib in Python?

9. What is Django?
10. What is the difference between list view and detail view?

SECTION B — (5 × 5 = 25 marks)

Answer ALL questions.

11. (a) Write a brief note on Numeric data types in Python.

Or

- (b) Write a Python program for finding biggest among three numbers using if..else statement.

12. (a) Write a Python program for converting decimal to binary number system.

Or

- (b) Explain the significances of Dictionaries in Python.

13. (a) Write the GUI based program for I/O operations.

Or

- (b) Outline the different window components in Python.

14. (a) What are the significant features of the Pandas library?

Or

- (b) Explain the architecture of Matplotlib.

15. (a) Write a brief note on creation of administration site for models.

Or

- (b) Explain the way to combine multiple QuerySets in a View.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Explain the definite and conditional iterative statements in Python with an example.
17. Discuss the various string handling methods available in Python.
18. Explain the implementation of event handling technique in Python.
19. Discuss the data visualization with Matplotlib in Python.
20. Describe the procedure for working with QuerySets and Managers.